

REMARKS

Claims 1-8 and 10-18 presently appear in this case. Claims 5, 7, 8 and 11-18 have been withdrawn from consideration. No claims have been allowed. The present amendment supplements applicants' amendment of April 20, 2007 and is further in response to the official action of January 22, 2007. Reconsideration and allowance are hereby respectfully urged.

Briefly, the present invention relates to a method for down-regulating the suppressive activity of CD4⁺C25⁺ Treg cells at the site of a lesion in the CNS or PNS of a subject in need by the administration of poly-Glu,Tyr. The poly-Gly,Tyr causes the down-regulation of the suppressive activity of CD4+CD25+ Treg cells at the lesion site and thereby boosts the immune response at the lesion site and causes effector T cells, which recognize their antigen at the lesion site, to home there and activate the resident cells to eliminate self-destructive compounds that cause nerve degeneration and to secrete growth factors that may induce axonal elongation, synaptogenesis and neurogenesis. The subject in need to whom the poly-Glu,Tyr is administered is one suffering from the neurodegenerative effects of an injury, disease, disorder or condition that has caused a primary neuronal damage lesion in the CNS or PNS of that subject, or in a subject having neurodegeneration at a lesion caused or exacerbated by

glutamate toxicity, or in an individual having a psychosis or psychiatric disorder.

In response to the final rejection of January 22, 2007, applicants filed an amendment on April 20, 2007. By advisory action of May 21, 2007, the examiner advised that the proposed amendments would not be entered after final because they raised new issues and the issue of new matter. On June 22, 2007, an RCE was filed requesting entry of the non-entered amendments after final and including a petition for suspension of three months under 37 CFR 1.103(c). During this period of suspension, an interview was conducted among Examiners Kolker and Hayes, the undersigned attorney and one of the inventors, Prof. Michal Schwartz. Prof. Schwartz traveled to Washington from Israel to make a presentation to the examiners explaining that the present invention was enabled for the treatment of many neurological diseases and that this invention is accordingly entitled to broad coverage. Submitted herewith is a copy of the slide presentation made during the interview.

At the interview, Mr. Hayes explained that the present wording of the claims, using "enhance functional neuronal recovery," is problematic as it would be difficult to determine when this takes place. He considered it to be hard to measure and quantify. He said that we should seek another way to claim the invention to permit broad coverage that does not suffer the problems he saw in the existing language.

In the course of the discussion about how best to claim the invention, attention was focused on the first two

paragraphs of page 21 of the present specification relating to the action of poly-Glu,Tyr in down-regulating Treg cells. These paragraphs of the specification teach that when poly-Glu,Tyr causes down-regulation of Treg cells, this boosts the immune response, thereby protecting CNS cells from further degeneration and enhancing functional recovery. By down-regulating the suppressive activity of Treg cells on the autoreactive effector T cells, the effector T cells are allowed to home to their antigen at the lesion site and activate the resident cells to eliminate self-destructive compounds that cause nerve degeneration and to secrete growth factors that may induce axonal elongation, synaptogenesis and neurogenesis. This effect of poly-Glu,Tyr in down-regulation Treg cells was also discussed in the slide presentation. Mr. Hayes stated that claims that specify that the method is for down-regulating the suppressive effects of Treg cells may be more favorably considered than the present language.

Accordingly, the present amendment to claim 1 attempts to incorporate the language from page 21 that the examiners stated may be more favorably received. It is urged that this new language obviates the enablement rejection. All of the activity of the present invention is essentially a result of the mechanism by which poly-Glu,Tyr down-regulates the suppressive activity of CD4⁺CD25⁺ Treg cells at the site of a lesion in the central or peripheral nervous system. Whether neurodegeneration is a result of an injury or a disease, it all begins with a lesion. By down-regulating the Tregs and

thereby enhancing the activity of T effector cells that would otherwise have been suppressed by the Tregs, the natural mechanism of "protective autoimmunity" is allowed to take its course with positive results for the patient, i.e., protection from further degeneration and enhancement of functional recovery. The mechanism of protective autoimmunity, substantially elucidated over the last several years in the laboratory of the present inventors and now well accepted in the scientific community, was explained in some detail in the slide presentation, as can be seen by the attached copy thereof.

As one of ordinary skill in this art (which is a very high level of skill) would accept that down-regulation of the suppressive activity of Treg cells would enable positive effects on any number of neurodegenerative conditions, regardless of etiology, the present claims are not unduly broad and should be allowed.

Accordingly, for the reasons as explained in applicants' amendment of April 22, 2007, as supplemented hereby, reconsideration and withdrawal of the rejections of record and allowance of the present claims are respectfully urged.

Although the present supplemental amendment is being submitted outside of the suspension period of 37 CFR 1.103(c), it should nonetheless be entered and considered in view of the fact that the interview was conducted within that period and the attached slide presentation and the proposed amendments

were discussed at the interview, and in view of the fact that examiners have the discretion to enter supplemental amendments that do not necessarily literally fall within the enumerated requirements of 37 CFR 1.111(a)(2). See the rulemaking commentary with respect to this rule at 69 FR 56481 at 56517, where it states:

Examiners may enter and consider other supplemental amendments that are not listed in § 1.111(a)(2)(i).

Accordingly, prompt consideration of the present supplemental amendment and reconsideration and allowance are earnestly solicited.

Respectfully submitted,

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